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Orley Ashenfelter:
Welcome to The Work Goes On, a podcast from the Industrial Relations Section at Princeton University. I'm your host, Orley Ashenfelter, the Joseph Douglas Green 1895 Professor of Economics at Princeton University.
In this podcast series of conversations with leading thinkers and practitioners, we are creating an oral history of an entire generation of industrial relations experts and labor economists whose contributions to their fields have been absolutely extraordinary.
Our guest today is Robert Hall, who is the McNeil Joint Hoover Senior Fellow and Professor of Economics at Stanford University. He is renowned for his work in labor economics and especially for his work on aggregate labor market behavior. Bob, welcome to The Work Goes On.

Bob Hall:
It's a pleasure.

Orley Ashenfelter:
I'm so glad to have you here. Let's begin the discussion by talking about your background. Where did you grow up?

Bob Hall:
I grew up initially right where I live now, a few hundred feet from where I live now, near the Stanford campus. Then my father moved to UCLA when I was eight, so I spent the second half in West LA.

Orley Ashenfelter:
In West LA. What did your father teach?

Bob Hall:
Physiology.

Orley Ashenfelter:
Oh, so was he a doctor?

**Bob Hall:**
Well, he had an MD from Stanford actually, but physiology is the general equilibrium of the body.

**Orley Ashenfelter:**
Yeah, I know it's about ... when they cut you up I guess, physiology is one of the things that guides you. So, you lived in Los Angeles?

**Bob Hall:**
Yes. Yes, West LA.

**Orley Ashenfelter:**
I didn't know that. Did you go to high school there?

**Bob Hall:**
Yeah, I went to University High School.

**Orley Ashenfelter:**
I see. How interesting. What did you think of Los Angeles?

**Bob Hall:**
When you're a teenager, what do you think?

**Orley Ashenfelter:**
That's true.

**Bob Hall:**
Yeah.

**Orley Ashenfelter:**
Now I know, you went to ... how did it end up that you went to Berkeley?

**Bob Hall:**
Berkeley had one of the very best economics departments, it turned out. Of course, that wasn't on my mind when I decided to go there. Like almost all economists, I started out as a physics major, and so it was a good place. Not too far from home, but 400 miles from home, so that's about right.

**Orley Ashenfelter:**
Then did your parents move back to Palo Alto?

**Bob Hall:**
No. No, actually they lived in Brentwood for the rest of their lives.
Orley Ashenfelter:
I know you were at Berkeley. Did you have somebody there who influenced you to go to graduate school?

Bob Hall:
Going to graduate school was a family imperative.

Orley Ashenfelter:
Well, how did you get into economics if you started in physics?

Bob Hall:
First of all, I realized I wasn't really good at physics. I was kind of A minus, not A. Then I was involved in studying policymaking, and economics eventually seemed like the right major, and I never regretted that.

Orley Ashenfelter:
You were doing policy issues when you were in college?

Bob Hall:
Oh, yes, I was very involved in the organized Democratic Party, which my parents were active in, so actually quite early I was holding an office in the Young Democrats and that got me very involved in policy.

Orley Ashenfelter:
I didn't know that. Did you ever run for office?

Bob Hall:
Only within the Democratic Party.

Orley Ashenfelter:
Well, now I know you were at Berkeley, and were there some economists there that influenced you to go to MIT? How did it end up you went to MIT?

Bob Hall:
Oh, well, it was simple. I talked to people like Sid Winter and especially Dale Jorgenson, and they all said there's only one place to go, and that's MIT. So, I applied to MIT and I got in on the strength of letters from these people.

Orley Ashenfelter:
That sounds like a very sort of straightforward way to get from one place to the other.

Bob Hall:
Oh, yeah, yeah. Well, I was 23 when I got my PhD, so obviously it was a pretty straight line.
Orley Ashenfelter:
I know you were very young when you started doing things. So, who did you work with at MIT?

Bob Hall:
Peter Diamond I'd say more than anyone else was the one who read and criticized heavily. He was not happy with some of the things I came up with.

Orley Ashenfelter:
Is that right? What didn't he like?

Bob Hall:
Having an early critic was very good.

Orley Ashenfelter:
Well, if anything, it must've given you a thick skin.

Bob Hall:
Well, I'm not so sure. I benefited from it, I recognize that, but the overall major influence on almost all graduate students at the time was Robert Solow, and it was an exciting time in economics and Solow was totally on top of things. It wasn't that easy to get working papers in those days, but Solow had the working papers and he taught them, it was amazing. Friends of mine who were, for example, at Harvard were just studying the same old stuff, and everything new was at MIT. I mean, it was really dramatic.

Orley Ashenfelter:
Was he a good teacher?

Bob Hall:
Solow?

Orley Ashenfelter:
Yeah.

Bob Hall:
He was the best teacher in the world. You've had him on this podcast, right?

Orley Ashenfelter:
Yeah, we had a podcast with him. He's 98 and a half actually he explained.

Bob Hall:
Right, yeah.

Orley Ashenfelter:
He certainly had his hardball, or fastball I guess we'd say, if you're talking about baseball. What was your dissertation about?

**Bob Hall:**
It was about things that I remained interested in and pushed harder later. Mostly spreading consumption over time. One of the big deals in economics at that time was so-called optimal growth. So, Solow had created a model in which people had kind of a mechanical role. The production side was up to date, but it was obvious that you could think that consumers were optimizing, but they were optimizing through a central planner. But the same equations governed private consumption, so basically, I was pushing the idea of, and several chapters in my dissertation dealt with intertemporal consumption issues.

**Orley Ashenfelter:**
That's interesting. I wasn't aware that that was what you had done originally. Now your career, you're at MIT. First job at Berkeley, is that right?

**Bob Hall:**
Yeah, yeah. For a while I was zigzagging back and forth between Berkeley and MIT.

**Orley Ashenfelter:**
What do you mean by that?

**Bob Hall:**
They were the best departments at the time.

**Orley Ashenfelter:**
So, how long were you at Berkeley?

**Bob Hall:**
Three years. I got an offer from MIT during that period that was kind of attractive, so I went back to MIT as a faculty member.

**Orley Ashenfelter:**
Then how long were you at MIT?

**Bob Hall:**
Seven years.

**Orley Ashenfelter:**
And then Stanford?

**Bob Hall:**
Yeah, after that, I came to the Stanford area, the Center for Advanced Study and the Behavioral Sciences, and then like many other people, stayed on as a faculty member.
Orley Ashenfelter:
I also know that your appointment at Stanford is also in the Hoover Institution.

Bob Hall:
Correct.

Orley Ashenfelter:
That was probably a little controversial at the time you took the position, wasn't it?

Bob Hall:
Well, people like to say that. In fact, especially in economics, I mean, they wanted me and there was nothing very controversial about the work that I was doing. These reputations don't have much to do with reality.

Orley Ashenfelter:
Then, you've been at Stanford ever since. Actually, I want to start the discussion of your work. I read the article you wrote on the 50th anniversary of the Brookings Panel.

Bob Hall:
Correct.

Orley Ashenfelter:
I hadn't even thought about it, but you were one of the first members of the Brookings Panel and one of the first publications, maybe in the first issue of the Brookings Papers on Economic Activity. Isn't that right?

Bob Hall:
Yeah, first year, I think it was the second issue. They had three issues that year, so I don't think it was the very first one. I think it was the second one.

Orley Ashenfelter:
Yeah, and you must've been in your 20s?

Bob Hall:
Yeah, it was 1970, so I was 27.

Orley Ashenfelter:
27, and you've been with it ever since.

Bob Hall:
On and off, yeah. Well, depends, what does with mean in this? I attend. I think every year I've attended at least one of the meetings.

Orley Ashenfelter:
50 years.

**Bob Hall:**
I've missed only a few of the meetings, I think.

**Orley Ashenfelter:**
So that's 50 meetings at least, 50 years?

**Bob Hall:**
Oh, well, no, no, it's 100 at least. It's always met at least twice a year. Early in its history it met three times, but they cut back from that. Most of the time it's been two, so it's a little over 100.

**Orley Ashenfelter:**
You went to it, but I just mentioned that you went to at least 50.

**Bob Hall:**
Oh, well, yeah, but that's a very weak statement, I went to a lot more than that.

**Orley Ashenfelter:**
Yeah.

**Bob Hall:**
I only missed three or four.

**Orley Ashenfelter:**
Oh, is that right?

**Bob Hall:**
Effectively I was there more than 100 times.

**Orley Ashenfelter:**
So, I'm curious. I know it was started by Art Okun, and George Perry. Okun is no longer with us, of course. How did they come to get you?

**Bob Hall:**
They talked around. I think they called up people. They wanted to get mostly fairly young people. Perry was the MIT PhD, so he had connections. It was done on the network of people who know what was going on on a current basis in the profession.

**Orley Ashenfelter:**
Your article is really about the history of the labor studies that were done in the Brookings Papers, and you go through quite a heroically large number of various papers. I'm curious though, over the 50 years, what's changed?
Bob Hall:
Well, one thing that's obvious that's changed is big data. I was somewhat of a pioneer of actually using the then-available microdata. In fact, my first paper made use of that, so I was on the cutting edge, but most people would just look through BLS publications and copy numbers and put them into the computer. Everyone on the panel was computerized I have to say.

Orley Ashenfelter:
Big data. What else changed?

Bob Hall:
Well, along with the profession, the profession used more and more technical ideas. So for example, instead of having a consumption function, you have a consumption plan that satisfies first order conditions. More and more papers said the relevant first order condition is, and that's a sign of tightening up of the thinking.

Orley Ashenfelter:
It's kind of a tour de force paper actually in going through all of the work that was done in that period. I know the first paper I saw that you'd ever written was about labor supply, and that was, I guess, an example of early big data.

Bob Hall:
Yes, it was. Yeah.

Orley Ashenfelter:
It was published in this income maintenance volume, I know. How did you come to write that paper?

Bob Hall:
It struck me as an important topic. It was a time when the first round of experiments with human subjects had not yet produced results, but it was influential. It got people interested in things like ... labor supply was a very central issue, the experimental movement that got started in the late 1960s. So, kind of natural.
Other people were doing that, and I was this early contributor to what became kind of a standard topic, and using microdata to figure out how people chose how many hours to work and what the other influences were.

Orley Ashenfelter:
Yeah, so one of our earlier podcasts had John Pencavel, who wrote this very famous paper, survey basically of all the microdata studies that were done up to a certain point that he talked about as well.
Now, I have to ask you this. So, 1970 was a year of some inflation. In fact, the beginning of the inflation of the '70s, kind of like today. Do you see those as similar?

Bob Hall:
Well, first of all, you can get some notion of the total. At the very first meeting of the Brookings Panel, a night in the hotel in Dupont Circle cost 14 dollars.
Now in the same hotel, it’s 20 times that, so 280 dollars.

**Orley Ashenfelter:**
Yeah.

**Bob Hall:**
So yeah, inflation was an important topic. Sometimes more important, sometimes less, but there were very few episodes of anything resembling a decline in the price level. So, increases in the price level, it was a very one-sided process, still is.

**Orley Ashenfelter:**
And unemployment was low too.

**Bob Hall:**
Yeah, in spite of the fact that the title of my paper is, *Why Is Unemployment So High?*

**Orley Ashenfelter:**
That's right. I know, I hadn't thought about that. So what would you say, of all the papers you have contributed to the Brookings volumes, do you have a favorite?

**Bob Hall:**
Well, the first one certainly is a favorite because it got a lot of attention. I can't do justice because that's not the way that my brain works. It's not good at compiling lists out of a body of data.

**Orley Ashenfelter:**
Sometimes there's one that people think of as being something special that they did that they really like.

**Bob Hall:**
Yeah, okay, well, if you broaden it to all the articles that I've published, then I just go with the crowd. I have two very highly cited papers, the one Chad Jones and I ... *the paper on why some countries have higher output per worker than others*, which is by far my most cited paper.

**Orley Ashenfelter:**

**Bob Hall:**
Correct, yeah. It was submitted to, but summarily dismissed by *The American Economic Review*.

**Orley Ashenfelter:**
Oh, really? Was that me?

**Bob Hall:**
No, you were always good to me.
Orley Ashenfelter:
One of the things I wanted to ask you about, which is related, I think we're covering some of them. Most economists write articles, and you just mentioned articles, but you've actually written some books.

Bob Hall:
Well, not ones that compete with articles. I haven't written a book that was just from beginning to end new material.

Orley Ashenfelter:
No, books of course are usually not that.

Bob Hall:
Are mostly compiled from other work that I've done.

Orley Ashenfelter:
But I wanted to ask you about one that I think has received a fair amount of attention. I don't know if your name is necessarily connected to it as much, but that's the book you did on the flat tax.

Bob Hall:
Oh, okay, I wouldn't call that research, that was promotion. It was aimed at the general public and not at professional economists. Although it actually got a lot of traction from economists because it was a good idea.

Orley Ashenfelter:
What is the flat tax?

Bob Hall:
Well, I guess the first thing to say is that the flat tax isn't flat, but we'll come back to that. The story of that is Rabushka ... this is in the late '60s, '70s, and there was a big tax reduction movement, especially in California, which led to Proposition 13 in California.

Orley Ashenfelter:
Which we should tell people was basically held property taxes fixed for people that didn't sell their houses.

Bob Hall:
And low to begin with.

Orley Ashenfelter:
Yeah.

Bob Hall:
So, low and even lower as time went by. So, [Alvin] Rabushka was sort of a player as a political scientist in that, and so he heard about the flat tax from someone else because certainly the basic idea of some tax simplification was definitely floating around. Then he came to me and he said, "What is the flat tax?"

An economist at MIT, Carey Brown, had taught me all the principles that would underlie flat tax. It's essentially a cousin of the value-added tax, which subsequently has become a big deal in many countries other than the U.S. So, I sat down and I just sort of went back over my notes from Carey Brown's MITK course.

It's a way of making the value-added tax progressive, because the big knock on the value-added tax as a consumption tax, it appears to be regressive. So, this could be made more progressive according to ways that I outlined, and that became that book. But it was aimed at the general public, as I mentioned before, so the ideas about tax reform made their way later into a journal article. Of course, the book actually influenced economists because it helped promote the idea.

Orley Ashenfelter:
I think that actually if you do a Google search on flat tax, the book pops right up. I gather I'm not the only one who's actually done that and found your book. Now, you have a recent paper, I watched you present it I think in a, it must've been a Zoom probably during the pandemic on unemployment and recovery from recessions.

I was interested when you ... there are a couple things. One is this consistent decline in unemployment, basically. I realized what you had done is you had a graph in which you showed the decline of unemployment for each business cycle. We're going to come back to the business cycle issue in a second, and just erased the run-up in the unemployment rate, so that all you got to see were the declines, and they all look pretty similar, even though they were often at different levels.

But, what I noticed in your discussion was your focus on the unemployment rate, and even your comments to the effect that it was such a good measure of cyclical behavior. Is that what you think?

Bob Hall:
Absolutely, and that's what I've always thought, and I've always been right.

Orley Ashenfelter:
Now, why do you think that?

Bob Hall:
By, first of all, observing the history and a large amount of the history, the relevant history has played out as I've been involved in watching these experiences unfold and then studying the data. It's an overall judgment. It especially recognizes that competing ideas, for example, real GDP is not nearly as good a cyclical indicator, because there are non-cyclical forces that are very important for the movements of real GDP that leave no mark on unemployment. So, unemployment is un-trended and particularly valuable, so you don't have to try to figure out what the trend is. So that's my idea, and I'm sticking to it.

Orley Ashenfelter:
Actually, the real GDP serves many purposes. As you say, cyclical purposes are not always the one that we're interested in in any case. So, I'm glad you said that, because this leads me to what I'd like to ... We're coming to the end of our podcast, and I'd like to talk to you about something that over the 50 years you've also been doing, and that's the business cycle dating. For those that don't know, the
National Bureau of Economic Research has a dating system. Now, you've been involved with that for many years, isn't that right?

**Bob Hall:**
Yes, the committee was created in 1978, and I was a chairman, and I've been chairman ever since.

**Orley Ashenfelter:**
But wasn't there dating of recessions and depressions prior to that? Who started it?

**Bob Hall:**
Oh, it's always been associated with the National Bureau of Economic Research. It was done by a small group of economists affiliated with the bureau in New York actually, but they didn't really keep records other than noting the dates, and they didn't publish discussions of how they reached the conclusion. So, when Martin Feldstein took over the National Bureau and kind of reorganized it completely, one of the things was to formalize that process, and that was my job to see that that happened. It's happened a totally consistent way ever since.

**Orley Ashenfelter:**
That early group was Wesley Claire Mitchell and Arthur Burns and people associated with Columbia University.

**Bob Hall:**
Right, yes.

**Orley Ashenfelter:**
A rather storied, storied group. Now, let's say, first of all, the dating of recession has lots of political implications. I mean, people clearly pay attention to that and see it as a black mark for an administration if a recession happens on its watch and so on.

**Bob Hall:**
Right, right.

**Orley Ashenfelter:**
Why not just do the dating with the unemployment rate?

**Bob Hall:**
The committee has considered that topic many times and has always come to the conclusion that looking at a variety of things, it doesn't exclude unemployment, but it includes other physical measures like industrial production with respect to manufacturing.

It's very much a collective process. There's eight members of the committee that reaches a consensus before making a statement about ... the statement is just identifying months when there were so-called turning points when the economy starts to contract, and then that period is called a recession. The recession ends when the economy reaches its trough, and then typically turns around and starts expanding again.
Orley Ashenfelter:
You do this well after the dates when they're ... obviously you have to.

Bob Hall:
Yeah.

Orley Ashenfelter:
Typically, how much longer after a recession ends do you call it ended?

Bob Hall:
Around a year. The most recent recession, which was a very brief recession associated with the COVID pandemic, the numbers just stared out of the data. There was no ambiguity. You can see almost to the day when in late March of 2020 that the bottom fell out of the economy, and then a couple months later it was expanding. So, it was a very short and very deep recession.

Orley Ashenfelter:
Yeah, and we all know exactly how it got started and what the exogenous shock was that caused the trouble.

Bob Hall:
We can always remember what day we were told “don't come back to the office.”

Orley Ashenfelter:
Or when you got sick.

Bob Hall:
That too.

Orley Ashenfelter:
Yeah, I think I caught COVID on a flight from England in March of 2020.

Bob Hall:
Oh, okay, you were an early victim.

Orley Ashenfelter:
Yes, of course I couldn't get tested back in that early period, so I never really was sure, but my daughter was and she wouldn't let me near her kids, so I knew there was an issue.

Let me ask you about that, because this was an unusual one. There is another period, I asked Bob Solow, in fact, about this, and I'm curious what you think. 1946 was another period when it was basically self-engineered that there was going to be ... I don't know if you remember this. Well, you were a small child when this happened as was I, but no automobiles, for example, were made during the second World War, and so the whole armaments manufacturing enterprise had to be reconverted.

Bob Hall:
Yes.

Orley Ashenfelter:
Real GDP fell substantially. There was huge inflation, kind of a self-engineered situation. Do you think that is similar to what happened in the COVID period?

Bob Hall:
Oh, no, I think it was much more fundamental. There were about 10 million servicemen.

Orley Ashenfelter:
Oh, it was bigger, of course. I didn't mean to suggest it wasn't much bigger, but it was self-engineered.

Bob Hall:
Sorry, sorry, which is self-engineered?

Orley Ashenfelter:
Well, both of them. Both of them. I mean, we shut down the economy because of COVID, and likewise, we'd switched from armaments to non-armaments.

Bob Hall:
Right.

Orley Ashenfelter:
Not everybody did that, actually.

Bob Hall:
One thing I've studied is unemployment during that period. It was actually tracked... the formal process didn't begin till 1948, but they actually had a survey running before that, and unemployment during that period only rose a little bit. Unemployment was really very low during the war and then during the recovery resumption of normality in the economy.

Orley Ashenfelter:
Well, it always struck me as being similar to the COVID in the sense that there's big inflation. There was a big inflation in 1946, low unemployment, as you say, and sluggish real growth. Well, negative real growth actually in 1946.

Bob Hall:
Yeah, but in COVID, the unemployment rate went into the mid-teens. It was totally different in terms of the unemployment rate.

Orley Ashenfelter:
Yes, I guess that's right.

Bob Hall:
All those people that weren’t working were counted properly as unemployed, but nothing like that happened at the end of the war.

Orley Ashenfelter:
That's true.

Bob Hall:
It was just different conditions.

Orley Ashenfelter:
Bob, it's been a pleasure to talk to you, and I appreciate your coming clean on your views about unemployment.

Our guest today has been Robert Hall, Robert Hall, the McNeil Joint Hoover Senior Fellow and Professor of Economics at Stanford University.

Please join us again for the next episode of The Work Goes On, an Oral History of Industrial Relations and Labor Economics from the Industrial Relations Section at Princeton University. I'm your host, Orley Ashenfelter. Thanks for listening.

Announcer:

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